

CHAMBERS' EDINBURGH JOURNAL

CONDUCTED BY WILLIAM AND ROBERT CHAMBERS, EDITORS OF 'CHAMBERS'S INFORMATION FOR THE PEOPLE,' 'CHAMBERS'S EDUCATIONAL COURSE,' &c.

No. 457. NEW SERIES.

SATURDAY, OCTOBER 2, 1852.

PRICE 1½d.

ROBINSON-CRUSOEISM OF COMMON LIFE.

It is wonderfully exciting to read the adventures of a shipwrecked mariner; to find him cast away on a desert island, destitute of everything that before seemed necessary to his very existence; to see him settling himself down in a strange and untried form of life, substituting one thing for another, doing altogether without some other thing, turning constantly from expedient to expedient, bending to his will the circumstances that seemed his fate, and at length naturalising himself to the place, and living bravely on, truly and literally the Monarch of all he surveys. The avidity with which we drink in such details, seems to depend upon some principle in our nature; for a feeling of the same kind is excited by all other narrations of vicissitude. The picture of calamity would be merely tiresome, were it not for the rebound we expect: we want to see what the unfortunate whose story we follow will do; by what steps he will try to re-ascend, or by what expedients he will make for himself a new world in the depths to which he has fallen. This principle is known to the skilful novelist, and he is the most successful who knows it best. It is to the complete gratification afforded to the mystical sympathy referred to—the sympathy, not with calamity, but with struggle—that Robinson Crusoe owes its distinction as the most universally popular of all works of fiction; for although the facts of the narrative had probably never any actual existence, they are so rendered as to be instinctively received as the component parts of a thing eternally true in nature.

But in actual life the Robinson Crusoes are few, and the shipwrecked mariners many. The mass of castaways, when they find themselves separated from their kind, their comforts, their necessities, yield, after a few feeble efforts, or without effort at all, to what is called their fate, and die of cold, or hunger, or despair. These multitudes we take no note of. They pass away from the earth like shadows; or, if our eye follows them for a moment till the view is lost in the crowding incidents of life, we look upon them as the victims of unavoidable and irresistible circumstances, and so turn calmly away. But it would be well to examine this notion; to contrast the victims with the vanquishers; to inquire whether the train of circumstances really differed in their several cases; and so to ascertain the share individual character may have had in the result. Let us, by all means, continue to pity the victims, whether we find their bones bleaching in the desert, or stirred on the shore by the tide; but it may be suspected that we ought to pity them less for the hardness of their fate than for the weakness which could not

withstand it. A French writer has finely said, that history is the struggle of the human race with destiny. Even so, we think, is the history of individuals.

Look abroad into ordinary life, and examine the condition of its castaways. One finds himself alone in the crowd of mankind, with wind and tide against him, surrounded by influences like evil spirits, the earth dry and famished under his foot, and the heavens black with thunder above his head. He has no experience, little physical strength, only ordinary talent; but he has nerve and will: he can plod when necessary; he can stoop or climb as the time demands; he can cut a new path when he loses the old one; and so, step by step, he goes on—this gallant Crusoe—till he has conquered circumstances and reached a secure shelter. Another man: but here we must speak of crowds and classes, for imbecility affects whole regions of society at once. A certain branch of industry, we shall say—agriculture, handloom weaving, anything—is struck with decay, and its followers thrown out of employment. What course do the unfortunates take? They sit down and curse their day; they appeal to the sympathies of their more successful brethren; they lean idly wherever they can find support; and failing this, they starve in a body, or drift into the workhouses. In such circumstances, men seldom think even of the obvious expedient of changing their locality, far less of changing their employment. They are rooted to the soil like a plant; when the work they have been accustomed to is no longer wanted, they cross their hands; and so they remain, and wither, and despair, and die. Thus when the kelp business was at an end, the Scotch Highlanders sat down in their helpless hunger, till they were swept as with a besom out of the land they cumbered. Yet what Mechi has done for his Tiptree bog on a large scale, with expensive machinery, and hired labour, might have been done by each of them on a small scale, without expense, and with his own labour. A wholesome living might be wrested by determined men from the wildest nook in Scotland, and the sea alone would support a large population. What the people did, however, was merely to pick up such shell-fish as the waves chanced to throw at their feet, and hold out their lean hands for national charity.

As we ascend in society, a similar spectacle presents itself. All trades and professions, without exception, are crowded with once well-doing individuals, who now serve only to cumber the ground, and obstruct the progress of others. Whatever be his reverse, a man seems to think it necessary to abide by his employment and his station, even if he starves in the one, and excites pity or ridicule in the other. He will not see

that he has suffered shipwreck; that he has been thrown into entirely new circumstances; that he must disengage himself from old habits and prejudices, and construct anew his scheme of life. He is one of a tribe, and must stand or fall by his profession and his order. He has lost all perception of his own individuality, and is afraid to take a single step that is not prescribed by custom and example. But, independently of the Robinson Crusoes of the class, many such slaves of conventionalism achieve their freedom while intending only to better their condition. They emigrate to a new country, and find themselves actually in a desert island—an oasis in the wilderness—where it is necessary to work at whatever employment offers the means of subsistence—to resort to all sorts of shifts and expedients, and to submit cheerfully to the deprivation of things they had in former times reckoned necessities of life. The change is found to be conducive to vigour both of mind and body. The indolent become active, the delicate, strong. Neither the physical nor moral constitution is easily injured, except by the influences of artificial life. A man who dares not sit by an open window for fear of the draught of air, if thrown upon a rock in the sea—exposed for days and nights to all the winds that blow, wet, cold, and starving—sustains no injury. Persons in this situation, or similar ones, have remarked over and over again with astonishment, that they were never in better health in their lives!

The beneficial effect of emigration on the character and habits of the lazzaroni of Ireland, is sufficient to indicate the cause of many of the great evils of social life at home. People will not recognise the fact, that they are castaways of fortune, and require to scramble as well as they can for a subsistence. They like to read of the struggles of the Robinson Crusoes, but never think of imitating them. They have not imagination enough to see the analogy between such positions and their own; and it is not till they actually find themselves in some far-away desert, that the slumbering energies of their character are awakened. Then they have nothing to lean upon but their industry—nothing to look to but their ingenuity. Expedients must take the place of habits; necessity must be their law instead of prescription; the chains of conventionality—as strong among the lowest as among the highest—drop from their limbs, and the man rises up from the ruins of the slave and beggar. This consummation, however, is not the invariable result. Even emigration only increases, although to a large extent, the number of Crusoes; and there is still a portion of the people who drift to and fro as helplessly as sea-weed. But at home, the bulk of the people are in this condition; they have no capacity for expedients, which are the stepping-stones of progress. A resolute tradesman, when one thing fails, tries another; when one process is found tedious or expensive, he has recourse to another; and in the same way the whole of society is on the move onward and upward. But the movers are not the mass; they are the stirring spirits of the time, at whose ceaseless work the multitude gaze unreflectingly, grumbling when their own occupation grows scanty, and looking for relief, not to themselves, but to their neighbours, their superiors, their rulers.

Some time ago, a correspondent of ours, struck apparently with the true cause of the evil—the tyranny of conventional feeling—deprecated the emigration of

those classes supposed to be the most slavishly subjected to it, without having previously made a trial of their energies. He proposed that every 'genteel' family, before setting their lives and fortune upon the cast, should establish themselves for a time in some solitary district of their own country, remote from the comforts and conveniences of life, and try whether their industry and ingenuity were of an available kind. He seemed to be of opinion that in most cases the experiment would fail, and that thus many an unfortunate expedition into the wildernesses beyond seas would be prevented. We are of the same opinion, only we do not think either the experiment fair or the result desirable. The very atmosphere of our country is pervaded by a conventionalism which, as is proved by what passes every day before our eyes, cannot be counteracted by mere external circumstances. The family in question would feel themselves to be only amateur Crusoes; they would be haunted by the idea, that they were surrounded, at a distance of only a day or two's travel, by the 'genteel' society of which they had formed a part; and, above all, they would have the consciousness perpetually before them, of being able to withdraw from the adventure as soon as they lost heart. This last consideration of itself would be fatal. Nothing rouses energy and strengthens determination so effectually as the knowledge that we are irretrievably committed: the climber of some desperate but possible steep is never safe till the rope is cut beneath him; the crosser of a difficult ford is never sure of completing the feat till he has

stept in so far that, should he wade no more,
Returning were as tedious as go o'er.

The family, therefore, might fail in their experiment, and yet be fully adequate to the struggles of actual emigration.

The humanitarians of the day, though full of a fine Crusoe spirit themselves, seem not to recognise its necessity as a general principle. They draw a distinction that has no existence in nature between the classes they design to benefit and themselves, legislating for their protégés in the fashion of a permanent providence. They know that a very large part of the population must labour with their hands for hire—that this is an indispensable condition of all civilised society. They know likewise that the labour-market is necessarily full of vicissitude, that work of particular kinds is constantly shifting its place, now from one street to another, now from one town to another, now from one province to another. It would seem, therefore, to be their cue, to fit the labourer for the changes that are liable to beset the way of life he has chosen, or into which he has been thrown; to imbue him with the noble Crusoe spirit of adventure and expedient; and to leave his hands free to embrace his fortune wherever it may offer. But no such thing. Their grand effort at present appears to be, to chain him to the spot on which he happens to stand, by making him the possessor of some small house, or some small plot of ground. If the labour-market were permanent in its demand, exactly proportioned to the existing numbers, and yet elastic enough to meet the movement of population, this would be an excellent plan; but as it is, it may be doubted whether there is not in a system which restricts the locomotion of the workman, the germ of a great evil, both to the class to which he belongs and to the cause of general progress. It seems to us that this plan, which is now making such rapid strides over the

whole kingdom, is in antagonism with the other great influences that are occupied in developing the character of the age. While railway transit and steam navigation are labouring to break the chains that bound the workman to the locality in which he grew, the various land-investment societies are doing everything in their power to rivet them anew. But this hint must be understood as applied to the system in its general, not special application. There can be no doubt of its admirable effect in multitudes of individual cases: what we disapprove of, is the manner in which it addresses itself to the working-class as a body.

That no external circumstances at home, however terrible or desperate, can struggle successfully, except in a small minority of cases, with the spirit of conventionalism and the inert force of habit, is proved by what is passing around us in society. But it may at least be hoped, that reason is able to exercise a power which appears not to reside in the mechanical pressure of events. The misfortune is, that the calamities of life do not find our minds in a state of preparation to meet them. We have formed no *a priori* theory. We are able to sink, and to suffer—some of us bravely; we are able, when necessary, to 'die like the wolf in silence'; but of manly struggle we are incapable. Now, we have a plan of our own to propose, in which, we think, resides the grand arcana of social regeneration. Have you guessed it, intelligent reader? It is simply this: read *Robinson Crusoe*. But not as formerly. Do not regard it as a romance. Look upon it as a mirror of human life, in which the fortunes of men—in which your own possible fortunes are figured with photographic truth; and learn from it how to meet, how to resist, how to subdue them. Forget not, when overtaken by heavy misfortunes, that you have suffered shipwreck; and do not fancy that your desert island is a land flowing with milk and honey. Look at things as they are. Listen to the wind as it moans along the water, and to the sea as it breaks on that dread lee-shore. Remember that your safety depends upon your own courage, your own energy, your own ingenuity. Do not dream that you hear amid the din the voices of friends and comrades; that is proved by everyday experience to be a delusion; and, above all things, if you be of the station in which conventionalism is strongest, do not fancy that the eyes of genteel people are staring at you through the gloom!

AN EPISODE OF THE BATTLE OF THE BALTIC.

BRAVE old Denmark was sincerely neutral during the great French Revolution; but England, by a very questionable act, seized two Danish frigates—under search-warrants—and towed them to British ports. This arbitrary insult appears to have induced both Denmark and Sweden to join the 'Northern Armed Neutrality,' which they did in the middle of December 1800. Upon this, England embargoed all Danish and Swedish ships in our ports, and seized all, or nearly all, their colonies. Shortly afterwards, Admiral Sir Hyde Parker (commander-in-chief of the fleet), Admiral Lord Nelson, and Admiral Graves, sailed for the Baltic with some forty-seven ships of war. They passed without opposition through the Sound, and the Swedish fleet of seven ships of the line and three frigates, could not, or did not, leave Carlscrona; as to the Russian fleet, it was frozen up; besides which, the demise of the Emperor Paul caused a vacillation in the councils of Russia. The result was, that little Denmark was left unaided to bear the brunt of mighty England's vengeance.

Upon the crown-prince of Denmark—afterwards Frederick VI., one of the best sovereigns that ever swayed a northern sceptre—devolved the management of the nation's affairs; for he had been regent since 1784, in consequence of the mental derangement of Christian VII. The crown-prince was a brave and energetic man, and he made every possible preparation to defend Copenhagen—himself assuming the very responsible post of commander-in-chief. The land defences consisted of the Citadellet Frederikshavn, the Crown Batteries, and if they were as formidable in 1801 as they were when we saw them in 1850, they indeed possessed tremendous powers of destruction—also batteries on the shore of the island of Amak—Amager, as the English call it—which is separated from Copenhagen by a narrow arm of the sea called Kallebostrand. The Danish fleet was moored in the inner harbour, which is a very strong position, as the entrance is defended by booms, and batteries are along its east or seaward side.

On April 1, 1801, the English fleet loomed ominously in the horizon, and it became evident that a fearful combat was close at hand. The crown-prince issued his last orders to Admiral Fisher, the gallant commander of the Danish fleet, and to the officers in command of the several batteries. A terrible day and night was that for the Danes! They knew that with the morrow's sun many of their fathers, husbands, and brothers, must fall; and in case victory should declare on the side of the assailant, they knew not what horrors of war might befall their city. Yet the Danes—as brave and noble a people as any upon earth—yielded not to despair. They bitterly felt the cruel nature of their position, and with characteristic fortitude and unflinching resolution, prepared to meet it. They might be conquered, and their capital given to the flames—they knew that; but undauntedly did they rely on their native bravery, and the justice of their cause; for they believed they were engaged in a struggle of right against might.

At the hour of seven o'clock on this momentous evening of the 1st of April, a 'mess' of sailors on board a Danish ship of the line, the outermost of all in the harbour, had just received, in common with their shipmates, an extra allowance of *brændevin*—white corn-brandy, somewhat like whisky. They were filled with feelings of high professional pride and confidence, and eagerly pledged one another, with patriotic resolves, to conquer or die in the morrow's conflict. Some tossed off their allowance with national toasts. One man among them held his *brændevin* untasted until all the others had swallowed theirs. This man was a sailor who had volunteered to serve in the man-of-war only the previous day. He was a native of Copenhagen, and hitherto had spent his life in the merchant service; but he had offered himself patriotically on this great emergency to fight in his country's cause. There was nothing remarkable or striking in his appearance: he was a sun-burnt, hardy-looking young man of about five-and-twenty, and slight rather than muscular in appearance. Like many of his countrymen, his hair was very light flaxen, and his eyes bright blue. His name was Anton Lundt.

'Come, messmate,' said one of the sailors, 'what is your toast?'

Anton Lundt started a little, his lip quivered, and his eyes grew lustrous with hidden emotion. Holding his glass on high, he exclaimed with fervour: 'For Figen og vort Land—for Rosine og gamle Danmark!' (For the girls and our country—for Rose and

old Denmark!) and drained his *brændevin* to the last drop.

'Ah!' exclaimed his messmates, 'your sweetheart and your country—no toast can be better than that! Hurrah for Rosine and old Denmark!' Anton Lundt dashed the cuff of his sleeve over his eyes, and turned aside with a glowing heart, and a prayer on his lips.

On the eventful morning of the 2d April—

—To battle fierce came forth
All the might of Denmark's crown,
And her arms along the deep proudly shone.
By each gun a lighted brand,
In a bold determined hand,
And the prince of all the land
Led them on.

Nelson was the chief in command of the English ships engaged on this eventful day, for Sir Hyde Parker could not possibly come up with his portion of the fleet, as wind and tide were both dead against him. Of Nelson, then, and his ships, it is that Campbell sings:

It was ten of April morn by the chime;
As they drifted on their path,
There was silence deep as death,
And the boldest held his breath
For a time.

And well might the boldest hold his breath! It was no ordinary foe that British valour had to contend with, but one of the bravest and most skilful both by sea and land in the whole world. At length the dread signal flew 'along the lofty British line,' and each gun—

From its adamant lips,
Spread a death-shade round the ships,
Like the hurricane eclipse
Of the sun.

The appalling roar of a thousand cannon answered on the part of the Danes, and soon the very wind of heaven was stilled by the thundering reverberations of the artillery. We leave the historian to describe minutely the progress of the fight, and turn to the ship of Anton Lundt.

We have already said that this ship was the outermost in the inner harbour, and as the combat deepened, she was exposed to the heavy broadsides of two English seventy-fours. She was moored stem and stern, but her stern moorings were shot away, and she consequently drifted in such a position, that both the English ships poured in an awful fire that raked her fore and aft. In a few minutes, her bowsprit was cut to shivers; her foremast was splintered and tottering; her main-yard broken up; her mizen-mast entirely carried away, and drifting under her counter; her bows riddled with shot; and her upper decks strewn with dead and dying. Only about half a dozen of her guns could be brought to bear, and although the crew made every possible attempt to manœuvre the ship, so as to recover her original position, they entirely failed in doing so; and it was obvious that the unfortunate vessel would soon be a mere floating shambles, if not altogether shattered to pieces, and sent to the bottom.

If a boat could have been sent ashore with a hawser, the ship would speedily have hauled, so as to avoid being raked, and also her own broadside would have been available; but it would have been hopeless to send off a boat, as every yard of intervening water was ploughed up with round and grape shot, and a boat would have been specially aimed at, and sunk before she had gone a couple of lengths. Moreover, every boat in the ship had been staved or knocked to atoms already.

In this horrible crisis, Anton Lundt, who was stationed on the quarter-deck, stepped up to the captain, stripped on the waist, all begrimed with powder,

and sprinkled with the blood of his messmates, and said: 'I will leap overboard with a line, and swim ashore to that battery, and then you can bend a hawser to the line; and when we have hauled and secured it ashore, you will heave upon it, and get the ship back to her moorings!' The captain gazed a moment at the intrepid mariner who made such a chivalrous proposal, and then, without a word of reply, sadly shook his head, and significantly pointed to the water, which was all alive with hissing balls.

'I know it, captain,' rejoined the undaunted volunteer; 'but there is a God above all!' Without further parley, Anton seized a coil of small white line, and with the dexterity of a seaman, knotted the end over his neck and beneath one arm, bringing the bight over his shoulder for convenience in swimming. He then slipped off his trousers—the only garment he had on—and took a few loose coils in his hand, his messmates undertaking to attend to the running out of the bight after him. All was the work of a minute; and without pause, he plunged head-foremost into the sea from the taffrail, shouting, as he cleave the air: 'For Rosine og gamle Danmark—hurrah!'

He rose some dozen yards or more from the ship's stern, having dived straight for his bourn, which was not more than eighty yards distant at the most. The general surface of the harbour would have been perfectly calm, had it not been for the continuous swells created by the oscillations of the Danish ships, as they rocked to and fro under their heavy broadsides. Just as Anton Lundt emerged, a twenty-four pounder struck the water within a few yards of his back, but ricocheted exactly over his head, merely stunning him for a moment with the spray. He swam straight as an arrow, with the long and powerful strokes of a first-rate swimmer; and occasionally, when the grape and musket shots whistled thick as hailstones around him, he dexterously dived. Thus swimming and diving alternately, he very quickly sped two-thirds of the perilous distance, amid the cheers of his countrymen. At length, however, the nearest English ship observed him, and probably guessed his object; for the marines on her poop fired a close volley at him, and a scream of rage and despair from his messmates arose, when they beheld him wildly throw up his left arm in unmistakable agony, and flounder in what appeared his death-flurry. Then his body rose perpendicularly, till his shoulders were a foot or more clear above the water, and he slowly fell backward, with his head pointing to the Danish battery. Contrary to expectation, he did not sink, however, but floated at full length, with nothing but a portion of his face visible. After a pause, he was observed to be propelling himself with his feet—swimming on his back, in fact—and his messmates on board the ship, and his countrymen at the battery, now cheered louder than ever. Two minutes of breathless suspense followed, and then a dozen hands were stretched forth, and he was lifted up the stony slope that led to the level of the battery. A moment he turned round, and faced towards his ship—his right arm hanging helplessly down by his side, shattered above the elbow by a ball, and his naked body streaming with blood from several wounds—then he waved his left arm in the air, and feebly hurrahing, fell senseless in the arms of the soldiers. By the order of one of their officers, he was immediately conveyed out of further danger. Meanwhile, had victory to the Danish arms depended on poor Anton Lundt's single heroic effort, Denmark would assuredly have triumphed, for his scheme succeeded perfectly. A hawser had been attached to the end of the line aboard the ship, the soldiers promptly hauled it ashore and secured it, and then the man-o'-war was easily hauled out of her critical position.

Let us now briefly glance at the progress of the main battle. It commenced exactly at five minutes

after ten A.M., and in about an hour it was general on both sides. The Danes fought—as they ever have fought, and ever will fight—like worthy descendants of their Scandinavian forefathers, and for awhile the result seemed doubtful. As already mentioned, Sir Hyde Parker could not get to Nelson's aid; and it is related that this excellent man—who was as generous-minded as brave—endured dreadful anxiety on account of Nelson and Graves. In another half hour he could bear it no longer, and resolved to make a signal for the recall of the two subordinate admirals, remarking to his own captain, that if Nelson, whose extraordinary character he well understood, really felt himself in a position to continue the battle with a prospect of ultimate victory, he would heroically disobey the signal.

The signal of recall was accordingly hoisted, just at the time when the fire of the Danes had reached its acme, and it was yet a matter of considerable uncertainty to which side victory would incline. Nelson was swiftly pacing his quarter-deck, moving the stump of his lost arm up and down with excitement, and the balls of the foe whizzed thickly around him, stretching many a brave fellow lifeless at his feet. The splinters flew from the main-mast, which a ball perforated; and then it was that Nelson is said to have smilingly observed: 'Warm work! this day may be the last to any of us at a moment! But, mark you—I would not be elsewhere for thousands!'

The lieutenant whose duty it was to attend to the signals, now informed him that No. 39—'Leave off action!'—was hoisted on board the commander-in-chief. Nelson heard this unmoved, and made no reply. A second time the signal-lieutenant reported it to him, and asked if he should answer it in turn. 'No!' was the stern reply; 'but acknowledge it.' He then asked if his own signal for 'close action' was duly flying, and being affirmatively responded to, said: 'Mind you keep it so!' Let us quote the characteristic scene that immediately ensued:—

"Do you know," said he to Mr Ferguson, "what is shewn on board the commander-in-chief! No. 39!" Mr Ferguson asked what that meant. "Why, to leave off action!" Then, shrugging his shoulders, he repeated the words, "Leave off action? Now, — me if I do! You know, Foley," turning to his own captain, "I have only one eye—I have a right to be blind sometimes!" and then, putting the glass to his blind eye, in that mood of mind which sports with bitterness, he exclaimed: "I really do not see the signal!" Presently he exclaimed: "— the signal! keep mine flying for closer battle! That's the way I answer such signals! Nail mine to the mast!"

The action continued with increased vigour, for Admiral Graves, probably taking his cue from Nelson, also disobeyed Sir Hyde Parker's signal. At one P.M., the fire of the Danes grew weaker, and by degrees it slackened, so that at thirty minutes past two P.M., it had ceased altogether in many parts of their shore defences, and most of their ships struck to the English, although the Crown Batteries, and a few men-o'-war ahead of Nelson's position, still fought with desperation, and fired on the English boats sent off to secure the prizes. Some of the surrendered ships were, in fact, placed between two fires—that of friends and foes, and the unfortunate crews suffered proportionately. Nelson was both angry and grieved at this; and he immediately went into the stern-gallery, and addressed a world-renowned note to the crown-prince, couched in these words:—

'Vice-Admiral Lord Nelson has been commanded to spare Denmark when she no longer resists. The line of defence which covered her shores has struck to the British flag; but if the firing is continued on the part of Denmark, he must set on fire all the prizes that he has taken, without having the power of saving the men

who have so nobly defended them. The brave Danes are the brothers, and should never be the enemies, of the English.'

He sealed this in an unusually formal manner, saying, that 'it was no time to appear hurried.' Captain Sir Frederick Thesiger carried this letter ashore,* with a flag of truce, and delivered it to the crown-prince, at the Sally Port. The latter sent to know the precise meaning of Nelson, and he replied thus:—'Lord Nelson's object in sending the flag of truce was humanity; he therefore consents that hostilities shall cease, and that the wounded Danes may be taken on shore. And Lord Nelson will take his prisoners out of the vessels, and burn or carry off the prizes as he shall think fit. Lord Nelson, with humble duty to his Royal Highness the Prince, will consider this the greatest victory he has ever gained, if it may be the cause of a happy union between his own most gracious sovereign and his majesty the king of Denmark.'

The immediate result was a total cessation of hostilities, and a most complete victory to the English. When the contest was over, the wounded were gradually collected and removed to the hospitals and private houses of the city—to the latter when their personal friends claimed them. Many of the Danish soldiers and sailors engaged were natives of Copenhagen, or had relatives and dear friends therein, and the scenes that ensued during the afternoon, evening, and night, were heart-rending in the extreme. Parents, wives, brothers, sisters, and sweethearts, frantically ran from place to place, alike hoping and dreading to learn certain tidings of the fate of those so dear to them. All Copenhagen was a city of woe and wailing. Everybody had sustained a loss. Mothers and fathers wept for their brave sons killed, wounded, or prisoners; sisters for their brothers; girls for their lovers; the patriot for his poor conquered country and his slaughtered countrymen. Tremendous, in our estimation, was the moral responsibility of the English ministry for 'letting slip the dogs of war' for a slight cause—nay, strictly speaking, for no valid cause whatever. Our firm conviction is, that had England left Denmark to her own honourable instincts, the latter nation would never have given real occasion for an appeal to arms. Even yet more cruel and criminal was the bombardment of the city of Copenhagen itself, only six years subsequently to Nelson's *raid*—for it was nothing better. But they managed matters fifty years ago in a different manner from what the enlightened spirit of the age would now tolerate. No British ministry of the present day would dare or wish to act as did the ruling satchels in the early part of this century.

Anton Lundt—as true a hero as Nelson himself, although incomparably a humbler one—was, as already related, conveyed to the rear of the battery, and his wounds were attended to as well as circumstances would admit. Later in the evening, his father, an old invalid man-o'-war's-man, found him, and had him removed to his own humble home. The poor fellow had never recovered consciousness, and for many long hours he lay moaning, and occasionally struggling convulsively, under his natal roof, and in the same little room where he was born. His aged parents and a few friends wept around him; but there was one other watcher by his side, whose grief, although silent, surpassed theirs. It was his betrothed *Pige*, or sweetheart, Rosine Boerentzen—she whose image had excited his heroism, she whose name was coupled with Denmark as his battle-cry. She shed not a tear—her anguish was too deep for that—but sat by his lowly pallet,

* One of the grand basso-relievos recently placed on the base of Nelson's Monument, in Trafalgar Square, London, represents Nelson in the act of delivering the letter to the young captain who acted as his aid-de-camp on the occasion. The subjects of the three other relievos are *St Vincent*, *The Nile*, and *Trafalgar*.

supporting his head on her bosom, and wiping away the light foam from his bubbling lips. Ever and anon the dying sailor—for, alas! dying he was—would utter sea-phrases, or affecting words of friendship or of love, yet not even the voice of Rosine, continually murmuring in his ear, could recall him to sensibility.

The midnight hour approached: a medical man had just been in, and departed with the brief but decided assurance that the patient could not possibly survive many minutes. A worthy clergyman was kneeling with the family around the couch, praying to God to receive the parting spirit. In the midst of their supplications, the countenance of Anton Lundt was illumined with a gleam of unearthly triumph, and springing half-upright, he tossed his left arm aloft, and in soul-thrilling tones pealed forth his battle-cry of 'Rosine og gamle Danmark—hurrah!' He then instantly fell back a corpse on the bosom of his betrothed.

In the suburb of Oesterbro, at Copenhagen, is a naval cemetery, and it generally attracts the eye of the stranger, as it most forcibly did our own, by a number of rough, picturesque fragments of unhewn granite, strewn over the mortal remains of the brave men who fell fighting for old Denmark against Nelson. The simple words, '*Anton Lundt, død 2 April 1801,*' may be seen on one of them.

Rosine Barentzen never smiled again. On the first anniversary of the battle, she returned home from the cemetery, where she had been to place a wreath of *immortelles* on the grave of her betrothed, after the fashion of her country, and ere morning dawned, her soul had fled to rejoin her hero in heaven. Peace to the souls of the brave, and of all who loved and were loved of the brave who fell at the Battle of the Baltic!

WHY DOES THE CLOCK KEEP TIME?

A PENDULOUS body vibrates when it is suspended so that the centre of its mass is not placed directly under the point of suspension, because then the alternating influences of weight and velocity are constantly impressing it with motion. Weight carries it down as far as it can go towards the earth's attraction; acquired velocity then carries it onwards; but as the onward movement is constrained to be upward against the direction of the earth's attraction, that force antagonises, and at last arrests it, for velocity flags when it has to drag its load up-hill, and soon gives over the effort. The body swings down-hill with increasing rapidity, because weight and velocity are then both driving it; it swings up-hill with diminishing rapidity, because then weight is pulling it back in opposition to the force of velocity. Weight pulls first this way, then that way; velocity carries first this way, then that way: but the two powers do not act evenly and steadily together; they now combine with, and now oppose each other; now increase their influence together, and now augment and diminish it inversely and alternately; and so the suspended body is tossed backwards and forwards between them, and made to perform its endless dance.

It is related of Galileo, that he once stood watching a swinging lamp, hung from the roof of the cathedral at Pisa, until he convinced himself that it performed its vibratory movement in the same time, whether the vibration was one of wide or of narrow span. This traditionary tale is most probably correct in its main features, for the Newtons and Galileos of all ages do perceive great truths in occurrences that are as commonplace as the fall of an apple, or the disturbance of a hanging lamp. Trifles are full of meaning to them,

because their minds are already prepared to arrive at certain conclusions by means of antecedent reflections. Simple and familiar incidents, thus accidentally associated with the history of grand discoveries, are the channels through which the accumulating waters at length descend, rather than the rills which feed the swelling of their floods. The orchard at Woolsthorpe, and the cathedral at Pisa, were outlets of this kind, through which the pent-up tide of gathering knowledge burst. If they had never offered themselves, the laws of universal gravitation and isochronous vibration would still have reached the world.

If the reader will hang up two equal weights upon nearly the same point of suspension, and by means of two strings of exactly the same length, he will have an apparatus at his command that will enable him to see, under even more favourable conditions, what Galileo saw in the cathedral at Pisa. Upon drawing one of them aside one foot from the position of rest, and the other one yard, and then starting them off both together to vibrate backwards and forwards, he will observe, that although the second has a journey of two yards to accomplish, while the first has but a journey of two feet, the two will, nevertheless, come to the end at precisely the same instant. As the weights swing from side to side in successive oscillations, they will always present themselves together at the point which is the middle of their respective arcs. This is what is called isochronous vibration—the passing through unequal arcs in equal periods of time.

At the first glance, this seems a very singular result. The careless observer naturally expects that a weight hung upon a string ought to take longer to move through a long arc than through a short one, if impelled by the same force; but the subject appears in a different light upon more mature reflection, for it is then seen, that the weight which performs the longer journey starts down the steeper declivity, and therefore acquires a greater velocity. A ball does not run down a steep hill and a more gently inclined one at the same pace; neither, therefore, will the suspended weight move down the steeper curve, and the less raised one, at equal rates. The weight which moves the fastest, of necessity gets through more space in a given period than its more leisurely companion does. The equality of the periods in which two weights vibrate, is perfect so long as both the unequal arcs of motion are short ones, when compared with the length of the suspending strings; but even when one of the arcs is five times longer than the other, ten thousand vibrations will be completed before one weight is an entire stride in advance of the other; and even this small amount of difference is destroyed when the arc in which the weights swing is a little flattened from the circular curve.

But there is yet another surprise to be encountered. Hang a weight of a pound upon one of the strings, and a weight of two pounds upon the other, and set them vibrating in arcs of unequal length as before, and still their motions will be found to be isochronous. Unequal weights, as well as equal ones, when hung on equal strings, will swing through arcs of unequal length in equal periods of time. This seeming inconsistency also admits of a satisfactory explanation. It has been stated, that the motion of swinging bodies is caused by the earth's attraction. But what are the facts that are more particularly implied in this statement? What discoveries does the philosophic inquirer make when he looks more narrowly into it? For the sake of familiar

illustration, let it be imagined that a man stands at the top of the Monument of London, with two leaden bullets in his hand, each weighing an ounce, and that he drops these together. They go to the earth, because the earth's mass draws them thither; and since the two bodies exactly resemble each other, and start at the same instant upon their descent, they must of course both strike the pavement beneath simultaneously. There can be no reason why one should get down before the other, for the same influence causes the fall of each. The entire mass of the huge earth attracts each bullet alike, and the bullets, therefore, yield like obedience to the influence, and fall together to the ground.

But now, suppose that the two bullets were to be all at once fused into one, and that this combined mass were then dropped from the top of the Monument as a single bullet, would there then be any reason why the two ounces of lead should make a more rapid descent than they would have made while in separate halves? Clearly not. There is but the same earth to attract, and the same number of particles to be drawn in each case, and therefore the same result must ensue. Each particle still renders its own individual obedience, and makes its own independent fall, although joined cohesively to its neighbours. It is the mass of the attracting body, and not the mass of the attracted body, that determines the velocity with which the latter moves. The greater mass of an attracted body expends its superior power, not in increasing its own rate of motion, but in pulling more energetically against the attracting mass. Every particle of matter when at rest resists any attempt to impress it with motion. The amount of this resistance is called its inertia. When many particles are united together into one body, they not only, therefore, take to that body many points upon which the earth's attraction can tell, but they also carry to it a like quantity of resistance or inertia, which must be overcome before any given extent of motion can be produced. If the earth's force be but just able to make particle 1 of any body go through 200 inches in a second, it will also be but just able to make particles 2, 3, and 4 do the same; consequently, whether those particles be separate or combined together, their rate of travelling will be the same. Hence all bodies descend to the earth with exactly the same velocities, however different their natures may be in the matter of weight, always provided there be no retarding influence to act unequally upon their different bulks and surfaces. It is well known that even a guinea and feather will fall together when the atmospheric resistance is removed from their path.

The reader will now, of course, see that what is true of the motion of free bodies, must also be true of the motion of suspended ones, since the same terrestrial attraction causes both. There is no reason why the two-pound weight in the experiment should vibrate quicker than the one-pound weight, just as there is no reason why a two-ounce bullet should fall quicker than a one-ounce bullet. Here, also, there are only the same number of terrestrial particles to act upon each separate particle of the two unequal weights. Hence it is that the vibrations of unequal weights are isochronous when hung on strings of equal lengths.

Thus far our dealings have been with what has seemed to be a very single-purposed and determined agent. We have hung a weight upon a piece of string and set it swinging, and have then seen it persisting in making the same number of beats in the same period of time, whether we have given it a long journey or a short one to perform; and also whether we have added to or taken from its mass. But now we enter upon altogether new relations with our little neophyte, and find that we have reached the limits of its patience.

Take three pieces of string of unequal lengths—one being one foot long; the second, four feet; and the third,

nine feet. Hang them up by one extremity, and attach to each of the other ends a weight. Then start the three weights all off together vibrating, and observe what happens. The several bodies do not now all vibrate in the same times as in the previous experiments. By making the lengths of the strings unequal, we have introduced elements of discord into the company. The weight on the shortest string makes three journeys, and the weight on the next longest string makes two journeys, while the other is loitering through one.

This discrepancy, again, is only what the behaviour of the vibrating masses in the previous experiments should have taught the observer to anticipate. Each of the weights in this new arrangement of the strings, has to swing in the portion of a circle, which, if completed, would have a different dimension from the circles in which the other weights swing. The one on the shortest string swings in the segment of a circle that would be two feet across; the one on the longest string swings in the segment of a circle that would be eighteen feet across. Now, if these two weights be made to vibrate in arcs that shall measure exactly the twelfth part of the entire circumference of their respective circles, then one will go backwards and forwards in a curved line only half a foot long, while the other will move in a line four feet and a half long.

But both these weights, the one going upon the short journey, and the other upon the long, will start down exactly the same inclination or declivity. The reader will see that this must be the case if he will draw two circles on paper round a common centre, the one at the distance of one inch, and the other at the distance of nine inches. Having done this, let him cut a notch out of the paper, extending through both the circles to the centre, and including a twelfth part, or thirty degrees, of each between its converging sides. He will then observe, that the two arcs cut out by the notch are everywhere concentric with each other; therefore, their beginnings and endings are concentric or inclined in exactly the same degree to a perpendicular crossing their centres. These concentric beginnings and endings represent correctly the concentric directions in which the swinging weights commence their downward movements.

Now, since it has been shewn that bodies begin to run down equal descents with equal velocities, it follows that the weight on the short string and that on the long string must commence to move down the concentric curves of their respective arcs at an equal rate. But it has been also shewn that the one of these weights has a nine times longer journey to perform than the other; it is clear, therefore, that both cannot accomplish their respective distances in the same time. The weight on the shortest string in reality makes three vibrations, and the weight on the string that is next to this in length makes two vibrations, while the weight on the longest string is occupied about one; and the differences would be as 9, 4, and 1, instead of as 3, 2, 1, but that the weights moving in the longer arcs benefit most from acceleration of velocity. Although all the vibrating bodies begin to move at equal rates, they pass the central positions directly beneath their points of suspension at unequal ones. Those that have been the longest in getting down to these positions, have of necessity increased their paces the most while upon their route.

Suspended weights, then, only vibrate in equal times when hung upon equal strings; but they continue to make vibrations in equal times notwithstanding the diminution of the arcs in which they swing. This was the fact that caught the attention of Galileo; he observed that the vibrations of the lamp slowly died away as the effect of the disturbing force was destroyed bit by bit, but that, nevertheless, the last faint vibration that caught his eye, took the same

apparent time for its performance as the fullest and longest one in the series.

The instrument that has been designated by the learned name of pendulum, is simply a weight of this description placed on the end of a metallic or wooden rod, and hung up in such a way that free sideways motion is permitted. This freedom of motion is generally attained by fixing the top of the rod to a piece of thin, highly elastic steel. A pendulum fitted up after this fashion, will continue in motion, if once started, for many hours. It only stops at last, because the air opposes a slight resistance to its passage, and because the suspending spring is imperfectly elastic. The effects of these two causes combined arrest the vibration at last, but not until they have long accumulated. The weight does not stand still at once, but its are of vibration grows imperceptibly less and less, until at last there comes a time when the eye cannot tell whether the body is still moving or in absolute repose.

Now, suppose that a careful and patient observer, aware of the exact length of the suspending-rod of a vibrating pendulum, were to set himself down to count how many beats it would make in a given period, he would thenceforward be able to assign a fixed value to each beat, and would consequently have acquired an invariable standard whereby he might estimate short intervals. If he found that his instrument had made exactly 86,400 beats at the end of a mean solar day, and knew that the length of its rod was a trifle more than 39 inches, he would be aware that each beat of such a pendulum might always be taken as the measure of a second. The length of the rod of a pendulum which beats exact seconds in London is 39.13 inches.

But there are few persons who would be willing to go through the tedious operation of counting 86,400 successive vibrations. The invention of a mechanical contrivance that was able to break the monotony of such a task, would be hailed by any one who had to perform it as an invaluable boon. Even a piece of brass with sixty notches upon it, which he might slip through his fingers while noting the swinging body, would enable him to keep his reckoning by sixties instead of units, and so far would afford him considerable relief. But if the notched brass could be turned into a ring, and the pendulum be made to count the notches off for itself, round and round again continuously, registering each revolution as it was completed for future reference, the observer would attain the same result without expending any personal trouble about it. It is this magical conversion of brass and iron into almost intelligent counters of the pendulum's vibrations, that the clock-maker effects by his beautiful mechanism.

In the pendulum clock, the top of the swinging-rod is connected with a curved piece of steel, which dips its teeth-like ends on either hand into notches deeply cut in the edges of a brass wheel. The notched wheel is connected with a train of wheel-work kept moving by the descent of a heavy weight; but it can only move onwards in its revolution under the influence of the weight, as the two ends of the piece of steel are alternately lifted out of the notches by the swaying of the pendulum. The other wheels and pinions of the movement are so arranged that they indicate the number of turns the wheel at the top of the pendulum completes, by means of hands traversing round a dial-plate inscribed with figures and dots.

It is found convenient in practice to make the direct descent of a weight the moving power of the wheel-work, instead of the swinging of the pendulum, for the simple reason, that the excess of its power beyond what is required to overcome the friction of the wheel-work, is then employed in giving a slight push to the pendulum; this push just neutralises the retarding effects before named as inseparable from the presence of air and imperfect means of suspension. The train of wheel-work in a clock, therefore, serves two purposes—

it records the number of beats which the pendulum makes, and it keeps that body moving when once started. As far as the activity of the pendulum is concerned, the wheel-work is a recording power, and a preserving power, but not an originating power. If there were no air, and no friction in the apparatus of suspension, the pendulum would continue to go as well without the wheel-work as with it. With the wheel-work it beats as permanently and steadily upon material supports and plunged in a dense atmosphere, as it would if it were hung upon nothing, and were swinging in nothing; and also performs its backward and forward business in solitude and darkness, to the same practical purpose that it would if the eyes of watchful and observant guardians were turned incessantly towards it.

Galileo published his discovery of the isochronous property of the pendulum in 1639. Richard Harris of London took the hint, and connected the pendulum with clock-work movement in 1641. Huyghens subsequently improved the connection, and succeeded in constructing very trustworthy time-keepers, certainly before 1658.

But notwithstanding all that the knowledge and skill of Huyghens could do, his most perfect instruments were still at the mercy of atmospheric changes. It has been said, that the time of a pendulum's vibration depends upon the length of its suspending-rod. This length is measured, not down to the bottom of the weight, but to the centre of its mass. For the weight itself is necessarily a body of considerable dimensions, and in this body some particles must be nearer to, and others further from the point of suspension. Those which are nearest will, of course, in accordance with the principles already explained, have a tendency to make their vibrations in shorter periods; and those which are furthest, in longer periods. But all these particles are bound together firmly by the power of cohesion, and must move connectedly. They, therefore, come to an agreement to move at a mean rate—that is, between the two extremes. The top particles hurry on the middle ones; the bottom particles retard them in a like degree. Consequently, the whole of the weight moves as if its entire mass were concentrated in the position of those middle particles; and the exact place of this central position in relation to the point of suspension, becomes the important condition which determines the time in which the instrument swings.

In pendulums of ordinary construction, this relation is by no means an unvarying one—changes of temperature alter the bulk of all kinds of bodies. A metal rod runs up and down under increase and diminution of heat, as certainly as the thread of mercury in the tube of the thermometer does. A hot day, therefore, lengthens the metallic suspending-rod of a pendulum, and carries the centre of its weight to a greater distance from the point of suspension. By this means, the period of each vibration is of necessity lengthened. An increase of temperature to the extent of ten of Fahrenheit's degrees, will make a second's pendulum with a brass rod lose five vibrations in a day. All substances do not, however, suffer the same amount of expansion under like increments of heat. If the rod of the pendulum be made of varnished or black-leaded wood, an addition of ten degrees of heat will not cause it to lose more than one vibration in a day. But even this small irregularity is too vast for the purposes of precise science, and accordingly ingenuity has been taxed to the utmost to find some means of removing the source of inaccuracy, to invent some plan whereby the pendulum may be made sensitive enough to discover and correct its own varying dimensions as different temperatures are brought to bear upon its material.

The first successful attempt to accomplish this useful purpose was made by George Graham in 1715. He replaced the solid weight at the bottom of the rod by a

glass jar of steel of the five times column of the arrangement the mercury jar by the motion of the other, remained the rod. pendulum to the ext

Soon a pendulum who received chronometre returned only 1 mil of gaining from the rod of less weight. rods, which steel carter copper c the weight real poi generally because in its com myieldi

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glass jar containing mercury. The rod he formed of steel of the usual length; and because mercury expands five times more than steel, he fixed the height of the column of mercury in the jar at only $6\frac{1}{4}$ inches. In this arrangement he found that additional heat carried up the mercury in the jar, as much as it carried down the jar by the elongation of the rod. Consequently, the motion of the one perfectly compensated the motion of the other, and the effective centre of the weight always remained at the same precise distance from the top of the rod. By the application of this compensating pendulum, clocks are now constructed that do not vary to the extent of a tenth of a second in a day.

Soon after the invention of Graham's mercurial pendulum, John Harrison—the same clever mechanician who received L.20,000 from government for making a chronometer that went to Jamaica in one year and returned in another with an accumulated error of only 1 minute and 54 seconds—hit upon another means of gaining the same end. He brought a steel rod down from the point of suspension, turned it up into a copper rod of less length; and from the top of this hung the weight. He fixed the lengths of the steel and copper rods, which expand unequally, in such a way that the steel carried the copper down exactly as much as the copper carried the weight up; and thus the centre of the weight was still kept at the same distance from the real point of suspension. Harrison's pendulum is generally seen in somewhat the form of a gridiron, because many parallel bars of copper and steel are used in its construction, for the sake of rendering it firm and unyielding in all its parts.

MAGIC IN INDIA.

A CORRESPONDENT in India tells us that a military friend of his, on returning to England, and finding all astir there about mesmerism, writes to him that he had often had much cause to regret that, during his long residence of more than twenty-eight years in India, he was ignorant of the very name or existence of mesmerism; as he could recall to mind many instances of what he then deemed to be native superstitions, on which he now looked very differently, believing them to be the direct effects of mesmeric influence. These instances are daily and hourly exhibited in Indian dwellings, though either passing without notice, or ascribed to other causes. Children in India, especially European children, seldom go to sleep without being subjected to some such influence, either by the ayahs or the attendant bearers; and our military friend says, that he has himself repeatedly, in a few seconds, been the means of tranquillising a fractious, teething child, and throwing it into a profound sleep by the mere exercise of the will, quite ignorant that he was thus using, though in one of its simplest forms, a power at which he laughed heartily when displayed around him in some of its more hidden ramifications. We give the following in his own words:—

I shall now relate a circumstance, proving that the natives of India apply mesmeric power to the removal of diseases with the utmost success. I had in my establishment at Lucknow a *chuprasie*,* who was a martyr to the most deplorable chronic rheumatism. His hands, wrists, knees, and all his joints, were so greatly enlarged, and in a state so painful, that his duties had gradually become merely nominal. One day, he hobbled up, and begged my permission to remain at home for a few days, for the purpose of being cured of his agonising disease. I said: 'Certainly; get cured of your complaint, and let me see you when you return.' In a very few days, perhaps in four or five, to my great astonishment he returned, smiling

and joyous, with his limbs as pliant and supple as my own.

'What!' said I, 'are you come back already?'

'Yes, sir, by your favour, I am perfectly cured.'

'What! entirely cured?'

'Yes, sir; perfectly cured.'

'Well, then, tell me what medicine you took.'

'I took no medicine; I called in two women, *zadoo walees* (dealers in magic) from the bazaar, and gave them four pice apiece (about twopence each), and they cured me.'

'But how—what did they do?'

'They put me on a *charpase* (a low bed), and one sat at each side of me, and both passed their hands over my body so (describing long mesmeric passes), and thus they set me to sleep, and I slept soundly: when I awoke, I was free from rheumatism, and am now perfectly well.'

The master made no investigation of the matter; the man was laughed at, and told to return to his duties, which he continued thenceforth to perform with all his former zeal. Now, this was not regarded by the patient or the other servants as a strange thing, for they took it quite as a matter of course; and there is indeed no reason to doubt, that the natives of India frequently have recourse to *ghar phoonk*, or mesmerism, for the cure of rheumatism; but many interesting things are carefully concealed from the English, because we invariably ridicule or sneer at native customs—a mode of treatment peculiarly distasteful to the inhabitants of the East.

But though willing to make use of these mysterious powers in their beneficent and curative forms, there exist all over Hindostan abundant proofs of the dread of 'zadoo,' or witchcraft, among all classes, Moslems as well as Hindoos, when it appears to threaten them with evil. If a cultivator has transplanted his tobacco or other valuable plant, he collects old cracked earthen cooking-pots, and places a spot of limestone whitening on the well-blackened bottom of each. They are then fixed on stakes driven into the ground, so that the white spots may be seen by all passers-by. This ingenious process is meant to neutralise the influence of the 'evil eye' of the envious. The talismans worn by the natives, said to be always the same, consist of an oblong cylinder, with a couple of rings for a string to pass through to fasten them, and would appear to have been originally impregnated with the electric fluid. Children are invariably provided with such amulets to avert the 'evil eye;' and should any one praise their beauty, the parent spits on the ground, and declares them to be perfect frights.

The inhabitants of the mountainous regions east of Bengal—the Bhooteas, and others—accuse all those of Bengal of being great sorcerers; and when seized with fever in the low malarious tracts, which they must pass through on descending from the mountains and entering that province, for the purpose of bathing in the holy Ganges, or visiting one of the numerous shrines in the plains, the disease is invariably imputed to the incantations of the Bengalees.

Nor tree, nor plant
Grows here, but what is fed with magic juice,
All full of human souls.

Our military friend gives two other instances in which the effects produced were really and truly mesmeric, though of course ascribed to magic. He vouches for the facts, but leaves every one to form his own opinion:—

The wife of one of my grooms, a robust woman, and the mother of a large family, all living within my grounds, was bitten by a poisonous serpent, most probably a cobra, or coluber maja, and quickly felt the deadly effects of its venom. When the woman's powers were rapidly sinking, the servants came to my wife, to

* Running-footmen, who attend the carriage or palanquin, go messages, carry books or letters, or any light thing they can take in their hands.

request that the civil surgeon of the station might be called in to save her life. He immediately attended, and exerted his utmost skill, but in vain. In the usual time, the woman appeared to be lifeless, and he therefore left her, acknowledging that he could not be of any further service. On his reaching my bungalow, some of my servants stated, that in the neighbourhood a fakir, or wandering mendicant, resided, who could charm away the bites of snakes; and begged, if the doctor had no objection, that they might be permitted to send for him. He answered: 'Yes, of course: if the poor people would feel any consolation by his coming, they could bring him; but the woman is dead.'

After a considerable lapse of time, the magician arrived, and began his magical incantations. I was not present at the scene, but it occurred in my park, within a couple of hundred yards of my bungalow; and I am quite confident that any attempt to use medicines would have been quite useless, as the woman's powers were utterly exhausted, though her body was still warm. The fakir sat down at her side, and began to wave his arm over her body, at the same time muttering a charm; and he continued this process until she awoke from her insensibility, which was within a quarter of an hour.

The last instance we shall give occurred at Bombay. The writer says: On visiting Bombay in 1822, I was greatly diverted by a circumstance told to me by an old friend in the artillery there. He stated that he had had a *kulashee*, or tent-pitcher, in his service for many years; that he was a most faithful and active man; but that he had all of a sudden, and without any visible cause, become very greatly emaciated, feeble, and ghastly. His master had sent him to the hospital, to have the benefit of the skill of the regimental surgeon; but after the lapse of some time, he was sent back, with the intimation that the surgeon could not discover any specific disease, and that he, therefore, could make nothing of his case. On bringing back this information, my friend began to cross-question his servant, who would not at first acknowledge the cause of his disease; but at last, after much persuasion, he candidly avowed to his master, in confidence, that he was labouring under the effect of witchcraft. 'And do you know,' said my friend, 'that the fellow actually believed it himself!' And we both laughed most heartily. His master continued his examination, until the *kulashee* confessed that a certain Brahmin, officiating at a large tank close to the fortress of Bombay, had threatened him with his revenge, and was now actually eating up his liver, by which process he would shortly be destroyed. 'I will tell you what I did: I no sooner got the Brahmin's name, than I ordered my buggy, and quickly drove down to the tank. On reaching it, I inquired for the magician; and on his arrival, I leaped down, seized him by the arm, and horsewhipped him within an inch of his life, now and then roaring out: "I'll teach you to bewitch my *kulashee*, you villain!" "How dare you injure my servant, you rascal?" and so forth. In a very few minutes, the liver-eating Brahmin declared that he would instantly release the *kulashee* from the spell; that, on reaching home, I would find him recovered; and ultimately he was perfectly released. And, believe me," said my friend laughing, "that the fellow mended from that hour, and is now a capital servant."

In a series of interesting papers in the *Dublin University Magazine*, called 'Waren, or the Divine Afflatus of the Hindoos,' the writer gives a lengthened description of that strange possession (which he calls *daimonic*, preferring that word to *demonic*—the latter being exclusively evil or devilish, while the former implies a superhuman power for good as well as evil), with all its varied manifestations. This faith, if it may be so called, prevails over the whole of Western India,

its greatest stronghold being the province of Concan, not far from Bombay. There are three kinds of waren: the hereditary or family waren; the transmitted or tribe waren; and that which is summoned by a variety of spells and incantations, called the village waren; the last being, of course, the most widely spread, as almost every village has a temple dedicated to Devee, the frightful goddess who presides over and is consulted on every calamity, giving her responses in the person of some waren selected for the purpose. In the hereditary and tribe waren, the visitation continues at intervals through life in the person once influenced, and it is always regarded as a proof of divine favour, being seldom exercised but for beneficent purposes. Its approach is made known by sundry sudden changes and tremblings, and always by a nodding of the head. After heavings, pantings, gurglings, and moanings, composure returns, and the possessed begins his utterances, and always in the name of some divinity or other waren, speaking of himself as a distinct person, by the name of *Mayhen Jhad, my tree*, whom he reproves, admonishes, and advises, in such terms as 'My tree has broken such a vow'—'If my tree acts thus,' &c. This phrase has been variously explained, as the spirit of the root-man or family ancestor, speaking of his descendant waren as *my tree*, or as a simple allusion to his motionless condition.

The hereditary waren is the oracle of the household, as the village waren is of the entire neighbourhood, often usurping the functions of judge and jury, causing sometimes the innocent to suffer for the guilty, but also, by his prophecies, being the means of recovering stolen property. There are many other kinds of waren: a cholera waren, a sanitary waren, a necromantic waren; and so forth. The last named not only discovers the state of affairs of those who die suddenly, or disappear mysteriously, but pretends to raise the dead; and a story is recorded of an impudent impostor, taking advantage of the belief of the people in the identity of the persons thus raised, and personating so well a prince slain in battle some years before, that not only did his brother swear to his identity, but the widow actually threw off her weeds, and went to live with him!

When calamity or pestilence visits a place, the village oracle is consulted as to the cause of the anger of the goddess Devee, and the responses are given forth by her inspired waren, amidst a cloud of incense, strongly reminding us of the oracle of Delphi. When the sins have been pointed out which have caused the particular scourge, some sacrifice is prescribed, chiefly that of goats and cocks; sometimes the inspired waren desires a certain number of goats to be let loose, and driven beyond the boundary, and that he, the incarnation of the evil, will go with them. Of course, the scourge diminishes from that day. Several who have witnessed this practice in India, have been struck with the remarkable analogy it bears to the scape-goat of the Mosaic dispensation, sent into the wilderness burdened with the sins of the congregation.

The word waren signifies a dual possession—the one beneficent, and the other malignant. One curious instance is given of a man speaking in the person of Devee, and of himself as a third person, saying to a Brahmin: 'You are going to the Concan: take this fellow with you. He was happy and pure, performing my worship,' &c. Under the influence of waren, mild persons have become so infuriated as to die under the visitation; and it is related that, during a procession in honour of the flagellating waren, the infection spread, the waren was propagated through the whole multitude, who became so excited by the beating of drums, tom-toms, horns, great brazen trumpets, and other instruments, that, with dishevelled hair, and backs streaming with blood from their own flagellations, they danced forward with a measured convulsive motion,

bellying out and shaking their heads; and so terrific was the excitement, that a Portuguese servant who was passing began making the same frantic gestures, and could only be recovered after repeated cuts with the horse-whip—the Hindoos, meanwhile, exulting that their goddess had entered into a Christian! That such powers are made a matter of merchandise follows of course; and, like the woman who brought her master much gain by soothsaying, so there are persons who make a trade of going about with some wren, who is consulted on secret affairs, who foretells the future, and whose utterances are sold for money. Extraordinary instances are also recounted of wrens of the necromantic class, especially when they have worldly goods, becoming the dupes of those who foil them with their own weapons, that they may be the more readily despoiled. In the Mahratta country, except in the large towns, there are no physicians; and when simple remedies fail, they say: 'Send for the god,' or magician, just as in the case of our correspondent; and besides the sacrifice of goats and cocks, there is, under the name of religious fasts, a much more telling and significant prescription in the way of regimen.

It were impossible, in a space like ours, to give even an outline of the different species of wren and their strange practices, part of which would seem to be akin to what we call mesmerism and clairvoyance, with the addition of spells and sacrifices. We might write volumes, and search every volume that has been written on the subject, and we could expatiate nothing else than that from the beginning of the world, and we may say in every country in the world, there has been, under different names and forms, a very general belief in some supernatural power walking abroad on the earth, by which, when presuming on its possession, one man may rule over another to his own hurt or benefit, as the case may be. We have as little sympathy with those who pretend to account for everything, and would solve all mysteries by natural causes, as with those who yield implicit belief, and run after every new thing. If such powers are illusive—in their operations they are certainly not always so—and the illusion be mental; if faith be all that is needed, that strong faith which, if able on the one hand to remove mountains, on the other, causes scales to grow on the eyes of the mind, so that a man loses his identity, and is blindly led about by the will of another; or if the result of bodily disease, hysteria, or some other derangement of the nervous system, there still remains enough of mystery to awaken the solemn inquiry of the physician, the psychologist, the Christian, of every thinking man. Contradictions will meet him at every turn. He will find all theories more than usually fallacious. He will see a strictly matter-of-fact person, in seeming health, and of strong mind, so easily acted on as in a few seconds to present the appearance of a dotting idiot; and a highly imaginative person, or one driven about by every wind of doctrine, who cannot be touched. He will see the healthy taken, and the sickly left. If, then, it be disease, and whether mental or bodily, such disease and its causes must be latent indeed; and we confess we look for no 'coming man' who is to solve the mystery.

That this power, which we call mesmerism, was also known to the priests of ancient Egypt, is supposed to be proved by carvings on the temples of priests making the passes with their hands, opposite other figures, to produce the sleep; a circumstance which has been recounted as proving a connection between the ancient religion in Egypt, and some unknown faith formerly prevalent in India, at the time the temples of Elephanta, Kennerly, and others were built. We greatly admire the philanthropic Major Ludlow, who devoted his energies to the abolishing of the suttee; but whose labours met with very partial success, until, by searching their own Shasters, he discovered that there

was a time at which the rite did not exist. A greater than he, however, must arise before the other still more ancient and wide-spread faith can either be explained or abolished.

WHERE DOES LONDON END?

It is not only a well-understood fact, that the Great Metropolis is a sore puzzle to strangers, but even the dwellers therein are wont to give up, in despair, any attempt to define or limit it. What is London? There are two causes, or rather two sets of causes, which throw great doubt on the proper answer to this question. The one is the varying acreage or area comprised under this name, and the other is the natural increase of population over every part of the area. Let us shortly glance at both these groups of disturbing causes.

The original London was the nucleus of that which now constitutes the City of London. The London of the Britons before the Romans landed, is supposed to have been little other than 'a collection of huts set down on a dry spot in the midst of the marshes'; a forest nearly bounded this spot, at no great distance from the Thames; and a lake or fen existed, *outside* London, at or near the site now occupied by Finsbury Square. The area of London, at this early period, is supposed to have been bounded by—to use their modern designation—Tower Hill on the east, Dowgate Hill on the west, Lombard and Fenchurch Streets on the north, and of course the river on the south—a limited area, certainly, not much exceeding half a mile in length by a quarter in breadth. There are indications that brooks bounded this area on the north and west, and a marsh on the east; but there is no reason to believe that the city had walls. The terrible devastation in the time of Boadicea must have nearly destroyed London, destined to be replaced by one of Roman construction.

The Roman London was evidently of larger size. The ancient city-wall is known to have been of Roman substructure, although surmounted by work of later date. It had many turrets or towers, and seven double-gates, supposed to have been Ludgate, Newgate, Aldersgate, Cripplegate, Bishopsgate, Aldgate, and the Tower Postern-gate; and the streets now named from those gates will serve to mark out the included area. Roman London may be said to lie about sixteen feet below *our* London, over all this area; about two feet being the *debris* of the Roman buildings, and the rest being subsequent accumulations of rubbish, at the rate, say, of a foot in a century. In the later Saxon and Norman times, the western portion of the wall was extended so as to include a somewhat larger area, the utmost limit of 'London within the walls' being 370 acres.

But London refused to stay within its walls; it walked forth into the country; and even so far back as 1662, London, beyond these limits, was four times as large as that 'within the walls.' Of this exterior portion, 230 acres constituted the 'city without the walls,' subjected to civic jurisdiction by successive grants; it formed a belt nearly around the portion 'within' the walls. These 600 acres, less than a square mile, have ever since constituted the 'city of London,' divided into two portions—'without' and 'within' the walls. There are ninety-eight parishes in the inner portion, and eleven in the outer; but the London which lay beyond the corporate rule had no social or political bounds placed to its extension. There were the ancient city of Westminster and the village of Charing, on the west; and London marched along the Strand to meet them: there were Kensington and Bayswater in the remoter west, and Piccadilly and Oxford Street became links to join them to London: there were Killarn and Hampstead and Highgate, Newington and Hornsey and Hackney, on the north; and London has travelled along half-a-dozen great roads northward to fraternise with them. So, likewise,

on the east; and so, likewise, crossing the river to the south, do we find this same process to have been active: villages and hamlets have become absorbed into London, by London going to meet them.

If we now ask, Where does London end? it will be found that this ramification perplexes the subject greatly. Who shall say that such or such a hamlet is not in London? Who is to draw the line, and where? It was said ten years ago, that the metropolis is a hundred and forty times as large as the city of London 'within the walls'; but even this is vague, unless we know where the limit is placed. One mode of grouping, adopted before the appointment of the Registrar-General of births, &c., depended on the 'London bills of mortality,' or the record of deaths preserved by the parish-clerks. London, in this sense, included the city within the walls, the city without the walls, Westminster, and about forty out-parishes. Southwark was not included in these bills originally, but became a component part afterwards. The Registrar-General, under the improved modern system, gives an immense range to London; it includes the City, Westminster, Southwark, all the out-parishes of the former system, and the villages or hamlets of Bow, Bromley, Brompton, Camberwell, Chelsea, Deptford, Fulham, Greenwich, Hammersmith, Hatcham, Kensington, Brompton, Marylebone, Paddington, Pancras, Highgate, Stoke-Newington, and Woolwich. It is true, he calls all this the 'metropolis'; but the metropolis is in common parlance identical with 'London.'

The population returns are not even a correct test in this matter, for they include different districts at different times. In 1821, of the eighteen villages or hamlets named above, only five were included in the 'metropolis'; and in 1831, there were two additional. The metropolitan population in 1841, in comparison with that of 1831, differs by no less than 200,000 on this mere question of nomenclature alone, independent of real increase on other grounds. The poor-law grouping differs again from that of the Registrar-General; the metropolis, or the 'London division,' does not include so many of the marginal parishes as the Registrar's system. Again, the Post-office arrangement is independent of all the others; for it is based upon taking St Paul's as a centre, and drawing circles around this at a definite number of miles' radius; and the metropolis is thus made expansible on geometrical principles. Then the parliamentary limit is *sui generis*; for the metropolis here comprises the City of London, the city of Westminster, the borough of Southwark, and the five modern boroughs of Marylebone, Finsbury, Tower Hamlets, Greenwich, and Lambeth—a very capricious limit, truly; for while it includes the far east at Woolwich, it excludes Pimlico, Brompton, and a vast adjoining area. Lastly, to give one more mesh to this net, we find the police metropolis to be the most grasping of all: by the original act of 1829, the metropolis is made to fill a circle twenty-four miles in diameter, having Charing Cross in its centre; while in 1840, this circle was coolly stretched to a diameter of thirty miles.

When a reader, therefore, is told of the vast increase of population in London, let him sober down his astonishment until he knows which (among half-a-dozen different Londons) is the one alluded to. As 'our own country' may be taken to mean England only, or England and Wales, or Great Britain, or the United Kingdom, or the British Empire, in five different degrees of largeness, so may 'our metropolis' have at least as many significations. Tables of metropolitan population have been issued in the following form:—1750, 676,250; 1801, 900,000; 1811, 1,050,000; 1821, 1,274,800; 1831, 1,471,941; 1841, 1,873,676; 1851, about 2,250,000. But this table is subject to the correction above hinted at. Nearly a century ago, Maitland said: 'This ancient city has

engulfed one city, one borough, and forty-three villages.' A formidable addition has since been made to this 'engulfed' family. So enigmatically is this metropolis of ours, that it would be equally true to state that 'London is rapidly increasing in population,' and that 'London is slowly decreasing in population.' The metropolis, as a whole, yearly increases its numbers; but the City, the original London, is less populous now than a century ago, on account of the streets having been widened, and many small dwelling-houses removed, to make way for large commercial establishments, the managers and clerks of which almost all sleep out of London.

If we glance over a map of London, or, still better, take a resolute series of omnibus-rides or foot-rambles, we shall find ourselves as little able as before to settle the question, 'Where does London end?' That huge mass of small streets and poor houses, comprising the borough of the Tower Hamlets, allows us no rest till we get three miles eastward of St Paul's. Beyond this point, there are a few patches of Bow Common yet left; but Poplar and Blackwall, Bromley and Bow, tell us to go yet further eastward to the river Lea; and even West Ham and Stratford, though on the Essex side of the Lea, seem to claim a metropolitan position. Again, passing over Victoria Park—that pleasant oasis in a desert of houses—and bending round towards the north, we may ask where are the fields; and may wait until 'echo answers, Where.' Hackney and Homerton, Clapton and Dalston, Shacklewell and Newington, not only have the houses ranged themselves closely along the main roads to these villages, but have filled up nearly all the vacant ground between those roads. Is Tottenham to be included in our London; and if not, why not? And at Highgate and Hampstead, as the rows of houses have ascended these hills, and climbed over the hills, why stop there? why not send London still further out of town? Look at the new town springing up around the Camden Station; at the Portland Town westward of Regent's Park; at the Westbourne Town far beyond the Paddington terminus; at the new town west of Kensington and the Thames—all these are the mere filling up of the districts which had before been marked out by the great roads; and the great roads themselves are carrying out their rows of houses still further into what we may, in courtesy, designate 'the fields.'

So it is on the south side of the river. Of the 13,000 vehicles which cross London Bridge in twelve hours on an average summer day, an immense number is employed in conveying 'City men' to and from their homes on the south of the Thames. Walworth, Camberwell, Kennington, and Brixton were once on the border region between town and country; nay, the city really *did* reach the country there; but now, all these belong to London. A bit of green at Kennington is, by good-luck, to be kept green as a people's park; but nearly all else has become brick and mortar; the City man has to go further to get a pleasant house and a good garden, and we have to go further to ascertain—where does London end?

Among many curious proofs of the wide grasp of the all-absorbing metropolis, we may adduce the horror of the Pentonvillians at the proposed new cattle-market. How many years ago is it since Copenhagen Fields were almost beyond the regions of civilisation, known only as a prairie lying between London and the Copenhagen Tea-gardens? Let any one, whose knowledge of the district goes back fifteen or twenty years, answer this question. But now, Copenhagen House itself is brought within the limits of London, by rows of goodly houses belting it in on the north; and the gentilities of the new town are shocked at the threatened advent of bullocks and sheep.

If we look into the stupendous *London Directory*, it

does not nearly 70 crescents, courts, walks, but included, In sl end by familiar London

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does not remove our troubles; it gives us the names of nearly 7000 streets, places, roads, squares, circuses, crescents, quadrants, rows, hills, lanes, yards, buildings, courts, alleys, gardens, greens, mews, terraces, and walks, but it does not tell us how far the suburbs are included, nor what are the principles which determine the inclusion or exclusion.

In short, we began by asking a question, and must end by leaving it unanswered. Although tolerably familiar with London, we cannot tell—'Where does London end?'

EDUCATED SKILL.

It is well known, that in the manufacture or preparation of most articles in the arts, the main cost lies in the judicious application of skilled labour. The value of the raw material is usually of comparative small amount. A pound's worth of iron makes six hundred pounds' worth of penknives; and cotton, which in the state of gingham may be bought at 3d. per yard, is sold for the same weight as gold in threads for Brussels lace.

It is therefore obvious, that the great advantage of cheap raw material is in the rude stages of manufactures, or when our skill in production is not inferior to that possessed by our neighbours. In a manufacture in which the cost of the finished article is several hundred times the price of the materials used to make it, it is skill, and not the original cost of the material, that determines successful competition.

We find that all European nations except England, have accepted this fact as a principle of state, and have founded schools and colleges to train their industrial population in the knowledge of art and science, which are the only true foundations of practical skill in an advanced stage of civilisation. In fact, we in this country have for some years seen this truth, so far as art is involved, and have established Schools of Design; but we have forgotten that art in industry is chiefly used to adorn the productions of science, and have neglected the latter. What circumstances have happened in the last few years in the history of the world, that compel an allusion to this neglect in a speech from the throne?

The marking features of our age are the great economy of time, and the practical abbreviation of space. Coal and iron are now transported by other means than by slow-going trains or coast-hugging luggers. Iron horses, which feed on coal and drink only water, go screaming over the country at a gigantic pace, dragging with them the whole produce of coal-mines and ironworks. Marine monsters, related to these, plough the ocean, and scatter our natural riches over the world, receiving in exchange the produce of other climes. The earth is bound round by chains, which render geographical distribution arbitrary distinctions, and enable thought to be reciprocated without being arrested by distance in space. Blind must be the nation that does not see in all this an alteration of conditions, which introduce new elements into the competition of industry. The changes may be summed up in the remark, that as improved locomotion distributes raw material to all lands at a very slightly increased cost for the transit, manufacturing competition among nations is resolved into a race for intellectual pre-eminence.

This truth is less likely to be speedily acknowledged by us, because if our native science languishes, we have yet capital to import it; and we do not see that this is only accelerating our overthrow. But the relative influence of abundance in raw material, and the application of science to its development, may be seen by an illustration from a barbarous country, in which the former is plentiful, and the latter is beginning to shine on it by means of an enlightened prince.

Siam, as our readers know, is an important kingdom situated between the Burman Empire on the one hand, and Cochin-China on the other. It abounds in natural resources, but exports only sugar, spices, drugs, and lead, and these only in comparatively small quantity; yet it has gold enough to make pavements for the sacred white elephants, and to throw down into the unfathomed abyss in the Cavern of the Sun. Of antimony, there are stores sufficient to render lustrous the eyes of the black-teethed beauties of Siam; while silver, iron, copper, lead, and fuel, are known to abound in these favoured regions. Yet with all these local advantages, it is nearly certain that we could, in spite of the distance, successfully compete with the productions of copper and iron in their own markets, because we have applied science to their extraction and preparation.

Siam, like nations nearer home, is very proud of its own industry, and of its position among the states of the earth; and it may well be, seeing that its king is hereditary lord of the stars, and gives them permission to move in their orbits. The presumptive heir to the stars thought one day he would like to know what Europeans believed of his celestial powers, so he studied mathematics and astronomy from English books, afterwards extending his knowledge to navigation, to the natural sciences, and to English literature. Prince Chow Faa, who has, since April 1851, succeeded his sensual and ignorant brother, under the new appellation of King Somdet Phra Chom Klow, found his knowledge of science thus acquired a prodigious power in the improvement of his future terrestrial kingdom, although his celestial possessions vanished at the same time. Like Prince Henry of Portugal, the Siamese prince believed that the only princely talent worth cultivating, was 'the talent to do good'; and under his mental vigour, this distant kingdom began to develop in a wonderful manner. Like Peter the Great, he founded dockyards, and built ships of war equal to first-class English vessels, navigating them, not by eyes painted in front, as of old, but by chronometers and Greenwich tables. He introduced European discipline into the army, and taught it how to use artillery. He obtained miners of talent to examine into his mines, and the mode of working in them; but in his reforms he awakened the jealousy of the king and of the priesthood, and for the last few years has been obliged to conceal his talents and good designs under the yellow garb of a priest, which he threw off in the April of last year, a few days previous to the opening of our Great Exhibition.

In this case of a semi-barbarous nation, we see clearly that knowledge is power, and more surely is it so with regard to competing civilised nations. We, too, have a prince highly educated in science and in art, who is endeavouring to impress upon his nation the benefits of science. At the same time that the Siamese prince threw off the yellow robe of superstition and ignorance, the prince of this country invited all nations to throw off their robes of prejudice and vanity, and, in his own words, to commence at 'this new starting-point, from which all nations will be able to direct their future exertions.' It was a capital idea to make each nation the judge of its own position, by shewing to what point other states had attained. Our thinking men—our Brewsters, Herschels, Babbages, and a host of others—have declared that our deficiencies arise from neglecting science in its application to industry; and the general feeling of the public has ratified this judgment by their consent. In another article, we will allude to the means of accomplishing this want; but in the meanwhile may conclude by drawing attention to a couple of sentences uttered on a late occasion by Prince Albert:—'Man's reason being created after the image of God, he has to use it to discover the laws by which the Almighty governs his creation, and by making these laws his standard of action, to

conquer nature to his use—himself a divine instrument. Science discovers these laws of power, motion, and transformation; industry applies them to the raw matter which the earth yields us in abundance, but which becomes valuable only by knowledge; art teaches us the immutable laws of beauty and symmetry, and gives to our productions forms in accordance with them.'

ENGLAND'S FIRST COLONY.

WHERE did England plant her first colony? 'Why, in North America, to be sure,' says a transatlantic cousin: 'on those shores to which our fathers resorted during the seventeenth century, for the enjoyment of civil and religious liberty, and where they laid the foundation of those States whose wealth and power are now the wonder of the world.' Stay, Cousin Jonathan, not so fast. 'We reckon' that England made an experiment in colonisation some 250 years earlier than that, and one no less demonstrative of the enterprise and hardihood of our ancestors. There was a spot nearer home, the stronghold of a nest of pirates, who were to England such an annoyance as the corsairs of Algiers proved in later times to Southern Europe; and our monarch, provoked by their numerous and daring outrages, and carrying with him the enthusiastic concurrence of his people, resolved to dispossess them. Crossing the water in person, with 738 vessels of war, and a numerous army, he invested the place both by sea and land; and finding that it could not be taken by storm, he sat patiently down for nearly eleven months outside the walls, till the inhabitants were starved into a surrender. But every reader of history is familiar with the siege of Calais, so gallantly prosecuted by the English under Edward III., so gallantly endured by the French under Sir John de Vienne.

As soon as the keys were surrendered, the town was cleared not only of the soldiery, but of all the inhabitants, men, women, and children, the king's determination being to repeople it entirely with English. 'Thus all manner of people,' says a historian of 1688, 'were turned out of the town, except one priest, and two other ancient men, who understood the customs, laws, and ordinances of the place, and how to point out and assign the lands that lay about, as well as the several inheritances, as they had been divided before. And when all things were duly prepared for the king's reception, he mounted his war-horse, and rode into Calais with a triumphant clamour of trumpets, clarions, and tabours; the drum now sounding for the first time on French ground. The great lords, who, with their feudal retinues, had assisted in the siege, were rewarded with gifts of 'many fair houses' and lands, that through their tenantry and retainers they might assist in defending the new colony. Abundant encouragement was also given for the emigration of the stout men of Kent, and the substantial citizens of London, with their families. The streets and principal buildings received English names, and the borough was organised in unison with English feeling, being governed by a mayor and corporation. Thus commenced in August 1347 England's first colony, which in due time was represented in the home parliament by two members of the House of Commons.

The English Pale, as this settlement was called, had a seaboard extending about eight leagues, while it stretched some three leagues into the interior. Within

this space, a considerable population was located, not only much more numerous than in the present day, but including a much greater number of trades-people dealing in articles of luxury, as we infer from some records of Henry VIII.'s expenditure, which include for instance, dealings with five different jewellers. There is still existing at Calais a curious chart, dated 1460, containing a minute specification of the roads, farmsteads, mills, quarries, and bulwarks, as they then existed. Here are 'English Street,' 'Knight Street,' 'Evelyn's Waye,' 'Ye waye from Marck to St Peter's,' and 'Ye new main Bank.' Many of the larger country dwellings, which are rudely depicted, appear more like rustic fortalices than farmhouses of our day. Numerous towers, marked as 'bulwarks,' seem to have commanded the boundary and other more exposed parts of the Pale. The only road across the 'marshes' on the south and south-west was commanded by Fort Nieulay—then called Newlandbridge—a place of great importance, originally built in an extensive morass, and furnished with sluice-gates to the sea, which enabled its holders to flood the surrounding country at will. Not only the fortifications then existing, but those which succeeded them in later times, are now in ruin; but the curious traveller finds remains enough to repay a stroll among the grass-covered bastions.

In the town, we find Castle Street, Duke Street, Hill Street, Shoe Lane, and Love Lane—names which smack unmistakably of the island home of John Gibbons, Hugh Giles, Richard Gilbert, and other colonial householders, whose names appear on a still existing rent-roll.

Though the English monarch was instigated to the capture and colonisation of Calais mainly with a view to dislodge the pirates, who issued from its fastnesses and harassed our navigation, yet he very soon learned to appreciate the possession of such a frontier port and fortress as a depot for purposes of aggression, as well as a means of maritime protection. Moreover, it was afterwards perceived, that immense gain would accrue to the Exchequer from the maintenance of this station as a port of *entree* into the Netherlands for English manufactures; and though at a day when knight-errantry was infinitely more in vogue than commercial enterprise, these interests were carefully studied, so that the conquest of a small piratical town was turned to vastly better account than had been anticipated.

The preservation of a settlement so important, and yet surrounded by an inveterately hostile people, demanded no ordinary vigilance. The keeping of it was accordingly always committed to one of the most trusty of the English barons, with the title of lord-deputy, and the command of a sufficient garrison; while no expense was spared on the works necessary for its maintenance. There were stringent laws for the daily opening and closing of the gates, which were superintended by a knight or master-porter, and a gentleman-porter, with a staff of subordinates. The lord-deputy himself received the keys every evening, and delivered them in the morning to the knight-porter, with orders as to the number of gates to be opened for the day. This was done as soon as the first watch-bell had tolled three times, and the guard turned out. During the time of dinner, which was an hour before noon, the gates were invariably closed, and the keys again delivered to the lord-deputy, by whom they were 'hidden in a safe place, known only to himself.' When the meal was ended, and business resumed, they were reopened with the same ceremony as in the morning; and at four o'clock p.m., they were shut for the night. Except by special order of the deputy, none but the Lanthorn Gate was opened during the herring season. There were strict regulations also with regard to strangers lodging in the town; the keepers of hostelries and lodging-houses being sworn

to make their guests proper the lapse rendered During of Calais on a m other spo polia. V marriage Valois in the Engl rous of I the Cloth pavilions which e have be lished, c affording here as was cap There Henry V London, and Ea followin retinuo Bishop other n followin Mountj their re by He Nothin names, form a present even v surpris numer within proport Peter's been inside off in hung "On cham the st with sweet hung the w embl with belfr confi veni as t was your "gr head were sup thei first the C chm chie J. T.

to make a daily report of the number and quality of their guests. The French, by the way, have deemed it proper to maintain this custom of the place, despite the lapse of four centuries since its peculiar position rendered such espionage a necessary precaution.

During the 200 years that we boasted the possession of Calais, it was often the scene of courtly festivities on a magnificent scale—often, perhaps, than any other spot under English dominion, except the metropolis. We need scarcely remind the reader of the marriage of Richard II. with the youthful Isabella of Valois in the church of St Nicholas, a fête which cost the English monarch 300,000 marks; nor the rendezvous of Henry VIII. and Francis I., called the Field of the Cloth of Gold from the sumptuousness of the royal pavilions, and other accessories, the preparation of which employed above 2000 English artificers. We have before us a collection of annals,* recently published, chiefly from rare and ancient documents, and affording such details of the 'fashionable arrivals' here as give us a high idea of what this our first colony was capable of doing in its palmy days.

There landed, for instance, on the 8th of May 1500, Henry VII., accompanied by his queen, the Bishop of London, the Duke of Buckingham, the Earls of Surrey and Essex, with several other noblemen. Closely following, came the Earl of Suffolk, with an immense retinue of esquires, gentlemen, and yeomen; the Bishop of Durham, the Earl of Ormond, with seven other noblemen and gentlemen of rank; and in the following month, the Earl of Northumberland, Lord Mountjoy, Lord Devonshire, Sir John Wyngfield, and their retinues, to assist at a magnificent banquet given by Henry to the Archduke Philip of Burgundy. Nothing, as our annalist observes, but numbers, real names, and dates, can effectually enable the reader to form a notion of the state, 350 years ago, of this at present trist and unimportant frontier town. And even with these authentic data before us, it appears surprising how such a host of nobility, with their numerous retainers, should have been adequately lodged within the walls of Calais, on viewing the existing proportions of the town. The banquet was given at St Peter's, just without the walls—for it seems not to have been the mode to invite continental guests to 'walk inside'—the fine old parish church being partitioned off into various apartments for the guests, and richly hung with arras and cloth of gold.

Our Lady's Chapel was set apart for the archduke's chamber, the walls being hung with arras representing the story of Ahasuerus and Esther, and the floor laid with carpets strewed with roses, lavender, and other sweet herbs. Another compartment of the church was hung with tapestry, representing the siege of Troy; the walls of the choir being covered with blue cloth, emblazoned with *fleurs-de-luce*. The vestry was hung with "red sarsenet, most richly beseen;" whilst the belfry was ordained for the offices of the pantry, confectionary, and cellar. There "lacked neither venison, cream, spice-cakes, strawberries, or wafers," as the chronicler expresses it; an English fat ox was "poudered and lesed;" an immense number of young kids and venison-pasties were consumed, besides "great plenty of divers sorts of wine, and two hogsheds of hippocrass." Seven horse-loads of cherries were eaten, besides "pyppyns, grengenges, and other sugardys." The plenty was such, that the guests and their retainers could not consume all the viands the first day, wherefore the king ordered a second feast for the peasants, on the one following.

One of the largest of the apartments formed in the church of St Pierre, was appropriated as the guest-chamber, in which Philip dined with Henry and his

queen, the party eating off 'gold and silver vessels of goodlie fashion,' and pledging each other in 'cuppes and flagons of golde, garnyshe with perculles, rosas, and white hearts, in gemmes.' After dinner, the archduke 'daunced with the English ladies,' then took leave of the king and queen, and rode the same evening to Gravelines.

Among the august personages who sojourned at Calais in days of yore, none excelled the gorgeous priest, Cardinal Wolsey, in the display of pomp, or in the number and quality of his retinue. On the 11th July 1527, his landing *en route* to Boulogne was attended by the Earl of Derby, the Bishops of London and Dublin; the Lords Monteagle and Harredew, with a staff of knights, secretaries, physicians, gentlemen-ushers, officers of the household, gentlemen of the chapel, and other retainers; the legate's train of attendants alone requiring 900 horses. But at the same time came the pope's nuncios, the French king's ambassadors, and the captain of Boulogne, 'with a goodlie companie,' to welcome him. On the occasion of a previous visit, he brought over 12 chaplains, 50 gentlemen, 238 servants, and 150 horses.

The Harleian and Cottonian Manuscripts are rich in interesting details of another fashionable arrival at Calais—that of Anne of Cleves, on her way to England to be united in marriage to Henry VIII. Her train was composed of 263 persons, including the Earls of Oversteyn and Roussenberg, with their 'gentlemen, ladies, pages, officers, and servants.' The Lord High Admiral of England came over expressly to take command of the vessel destined to convey the bride across the Channel. Accompanied by the lord-deputy of Calais, and a numerous retinue, he went forth to meet the *fiancée* on her way from Gravelines. His dress, and that of his attendants, is recorded for our gratification:—"For he was apparelled in a coat of purple velvet, cut in cloth of gold, and tied with aigulets and trefoils of gold to the number of four hundred. Baldricwise, he wore a chain of strange fashion, to which was suspended a whistle of gold, set with precious stones of great value. The admiral's train consisted of thirty gentlemen of the king's household, apparelled with massive chains. Besides these, he had a great number of gentlemen of his own suite, in blue velvet and crimson satin, as well as the mariners of his ship, in satin of Bruges (blue), both coats and slops of the same colour—his yeomen being clad in blue damask." A foul wind detained the lady here for fifteen days, 'during which time, in order to afford her recreation, jousts and banquets were got up by the authorities.' The simplicity with which our gracious Queen travels from the Isle of Wight to Aberdeenshire, or takes a trip across the Channel to see her uncle Leopold, makes us almost forget that such gorgeous state attended every step of royalty in the olden time. Glance we now a moment at the commercial aspect of Calais during the English occupancy.

The Staple-Hall or Wool Staple (now called the Cour de Guise) built by letters-patent from Richard II., dated 1389, was a singular combination of palace and market, exchequer and cloth-hall; the seat alike of royalty and trade; for here our English monarchs often lodged, and within these precincts our ancestors established their seat of custom, beneath the royal eye and roof-tree. Hither were not only the 'merchautes and occupiers of all manner of wares and merchandizes' in England, but the 'merchautes straungers' of the Low Countries invited by proclamation to resort and repair, from time to time, there to 'buy and sell, change and rechange, with perfect and equal freedom and immunity;' provided always the traffic or 'feates of merchandizes' were effected according to tariff; 'our dread and sovereign lord the king mynding the wealth, increase, and enriching of his realm of England, and of this his town of Calais.' In the court of this our

* *Annals and Legends of Calais*. By Robert B. Calton. London: J. R. Smith. 1802.

Calasian Guildhall, the iron-clad man-at-arms, the gaily-decked esquire, or captain of the guard, used to mingle with the staid wool-staplers, clothiers, cutlers, or weavers, just arrived from our primitive manufacturing districts, laden with bales and hardwares for bartering with their colonial and Flemish customers; whilst the nobles, princes, and at times even the king of England, sat at the upper casements, countenancing if not enjoying the bustle of the mart. Immense fortunes were realised by the merchants of the Staple; they were often in a position to aid the exchequer of the mother-country; and one of them named Fermour was, from some patriotic act in money-matters, raised to the peerage under the title of Lord Pomfret. We are told that a great revenue was derived to the crown from the customs' duty here levied on wool; that which passed into the Netherlands alone amounting to 50,000 crowns per annum—an enormous sum in those days. Modern Vandalism has done for this building what time had failed to effect; and now there is little remains of it to gratify the antiquary, save its metamorphosed contour and a fine old gateway.

That a handful of troops and emigrant residents should have enjoyed for above two centuries the unmolested occupation of a sea-port town, and an extensive adjacent district, in one of the most powerful and warlike kingdoms of Europe, is a singular episode in the history of the two nations. At length, after an almost fabulous retention of the place, the very facility of tenure having led to heedlessness and neglect of proper precaution, the day of reprisal came. In 1558, the Duke of Guise, being put in command of a powerful army, effected its recapture without any signal display of valour on the one hand, or heroism on the other. On its surrender, the lord-deputy, with 50 of his officers, were detained as prisoners of war; the residue of the inhabitants had to turn out, as the French had done before, and were compelled to retire either to England or Flanders. All the property of every description was placed at the disposal of the conqueror, in honour of whom our famous Wool Staple was thenceforth called the Cour de Guise. The booty in gold, silver, and valuable merchandise was enormous, and even the common soldiers, we are told, made fortunes by their share of it. So perished England's first colony!

A FLOATING CITY.

The city of Bang-kok, the capital of Siam, consists of a long, double, and, in some parts, treble row of neatly and tastefully painted wooden cabins, floating on thick bamboo rafts, and linked to each other, in parcels of six or seven houses, by chains; which chains were fastened to huge poles driven into the bed of the river. The whole city rose at once like a magic picture to our admiring gaze. . . . If the air of the 'Fleet Street' of Siam does not agree with Mrs Yowchowfow and her children, or they wish to obtain a more aristocratic footing by being domiciled higher up and nearer to the king's palace, all they have to do, is to wait till the tide serves, and, loosing from their moorings, float gently up towards the spot they wish to occupy. Bang-kok, the modern capital of Siam, and the seat of the Siamese government, was computed, at the period of my residence there, to consist of 70,000 floating houses or shops, and each shop, taking one with another, to contain five individuals, including men, women, and children; making the population amount to 350,000 souls, of which number 70,000 are Chinese, 20,000 Burmese, 20,000 Arabs and Indians; the remainder, or about 240,000, being Siamese. This was the best census we could take, and I believe it to be nearly accurate. The situation is exceedingly picturesque. I was told that, when the Siamese relinquished the ancient capital of Yuthia, and first established the throne at Bang-kok, the houses were built upon the banks of the river itself; but the frequent recurrence of the cholera induced one of the kings to insist upon the inhabitants living upon the water,

on the supposition that their dwellings would be more cleanly, and, consequently, the inmates less subjected to the baneful effects of that scourge of the East.—*Neale's Residence in Siam.*

THE TWO PRAYERS.

BY MARIE J. EWEN.

I.

It was the hour for evening prayer—there came a goodly throng
Within that dim cathedral church to join the vesper song;
And *she* was there amid the crowd, and on the altar stair,
As if she were alone she knelt in the depth of her despair.

She did not heed the many eyes upon her beauty turned;
One vision still oppressed her soul, *one* grief within her burned.

The tones of holy minstrelsy, the solemn anthem strain,
They were like voices in a dream—as meaningless and vain.

Strange tumult reigned within her soul—there came a gush of tears,
Deep, wild, as if it bore along the passion-flood of years;
And 'Mary! Mary!' was her prayer, and 'Mary!' still she prays,
'O give me back the love of old—the light of other days!'

A deeper gloom o'erspread the aisles—the altar-lamp grew dim,
And fainter still the echoes came from the dying vesper hymn;
She listened for an answering voice—but no response was given:
The marble steps were cold as death, and silence was in heaven.

II.

Within that dim cathedral church once more she stood alone,
When from her cheek, and brow, and eye, youth's loveliness had flown;
She wandered down the gloomy aisles—no worshippers were there;
And on the altar steps she knelt in the depth of her despair.

The sunset's parting gleam came down to kiss the pictured pane;
Upon the marble stone it flung full many a crimson stain.
There was a hush within the air—no holy chant arose
To fill the aisles with joy, and break the spirit-like repose.

A broken reed, she lowly bent—life's passion dream was o'er,
And there were tears—repentant tears—not like to those of yore;
And murmurs of a nobler faith fixed on the sacred shrine,
'O human love so false, so vain! O love that is divine!'

Fair shone the symbol of the cross—the altar-lamp grew bright;
There came a gleam like trembling stars athwart her spirit's night;
She listened for an answering voice—the peace of God was given:
The marble steps were cold as death, but gladness was in heaven!

Printed and Published by W. and R. CHAMBERS, High Street, Edinburgh. Also sold by W. S. ORR, Amen Corner, London; D. N. CHAMBERS, 55 West Nile Street, Glasgow; and J. M'GLASHAN, 50 Upper Sackville Street, Dublin.—Advertisements for Monthly Parts are requested to be sent to MAXWELL & Co., 31 Nicholas Lane, Lombard Street, London, to whom all applications respecting their insertion must be made.